TECHNICAL REVIEW DOCUMENT OPERATING PERMIT 950PDE077

to be issued to:

Shafer Commercial Seating, Inc.
Denver County
Source ID 0310910

Prepared by Ashley L. Kendall March 27, 1998

I. Purpose:

This document establishes the basis for decisions made regarding the Applicable Requirements, Emission Factors, Monitoring Plan and Compliance Status of Emission Units covered within the Operating Permit proposed for this site. It is designed for reference during review of the proposed permit by the EPA, the Public and other interested parties. The conclusions made in this report are based on information provided in the original application submittal of November 15, 1995, and supplemental technical submittals of March 29, October 7, and October 15, 1996, and March 25, 1998. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

II. Source Description:

This source is primarily classified as a commercial wood furniture manufacturing facility under Standard Industrial Classification 2599. Ten percent (10%) of Shafer's overall manufacturing is done on site. The remaining 90% is imported from outside of the country. Their mill operation consists of various saws, sanders, etc. The finishing process requires five (5) paint spray booths for different steps in the process.

The Denver metropolitan are was previously designated by U.S. EPA as a nonattainment area for ozone. Under recently adopted revisions to the Federal Rules, the Denver metro area is no longer designated nonattainment. However, all SIP- approved requirements continue to apply in order to prevent backsliding under the provisions of Section 183(e) of the Federal Clean Air Act. The facility is located in the city of Denver in an area designated as non-attainment for ozone, Carbon Monoxide and PM-10 (particulate matter less than 10 microns in size). Facility emissions from regulated equipment are as follows:

<u>Pollutant</u>	Potential to Emit (tpy)	Actual (tpy)
VOC	90.0	15.4
HAPs	90.0	4 1

Potential to Emit is based on the maximum allowable emissions as defined by Colorado Construction Permit 88DE060. Actual emissions are based on the VOC and HAP levels reported for the 1997 data year on reports submitted to the Division on March 27, 1998.

This facility is not subject to the requirements of Section 112(r) of the Clean Air Act Amendments of 1990 based upon the Potential material usage as reported in the Title V application. This facility is also subject to the Maximum Achievable Control Technology (MACT) standard for Wood Furniture Manufacturing Operations (40 CFR 63, Subpart JJ and Colorado Regulation No. 8, Part A, Subpart JJ).

The facility is within 100 kilometers of Rocky Mountain National Park a Federal Class I designated area but there are no affected states within a 50 mile radius of the facility.

III. Emission Sources:

The following sources are specifically regulated under terms and conditions of the Operating Permit for this Site:

S001-S004, S006 - Five (5) Binks PFA 10-7 Paint Spray Booths, SN's: Unknown.

Discussion:

- 1. Applicable Requirements- Four of the paint booths above were installed and began operating on September 1, 1983. The fifth paint booth was requested in March 1998 with a projected service date of April 1, 1998. Final Approval Construction Permit 88DE060 for four (4) paint booths was issued on December 22, 1989, defining the applicable requirements for the coating operations and machinery cleaning at this facility. It was amended on March 21, 1990. The fifth paint booth was added to the construction permit as part of the Title V process. This source is a synthetic minor for New Source Review (NSR) in a non-attainment area. Since the time of the source's last modification to their permit Division Policy has changed concerning synthetic minors. If a limit is less than 10% below the major source threshold (i.e. 99 tons per year) all insignificant activities emissions must be tracked. The source has agreed to limit their emissions of VOCs to 90 tons per year to avoid tracking insignificant activities. This change has been directly incorporated into the operating permit. The applicable requirements for this facility include:
 - 1. Visible emissions shall not exceed 20% opacity
 - 3. Emissions of air pollutants shall not exceed 90.0 tons per year of volatile organic compounds (VOCs)
 - 4. An extensive record keeping program will be implemented to demonstrate continual compliance with permitted emission limits. Records shall include total quantity of VOC containing material consumed, VOC content of each of these materials, total quantity of VOC containing waste collected and VOC content of this waste material. These records shall be kept on a rolling 12-month total.

- 6. Reasonable Available Control Technology (RACT) requirements shall be met by routine replacement of spray equipment and booths for increased application efficiency, employee training in efficient use of equipment, and good housekeeping to reduce spillage and evaporation from open containers.
- 7. Revised APEN reporting in accordance with Regulation No. 3, Part A.II.

Added to the operating permit are the requirements of the Wood Manufacturing MACT. As stated in the MACT there are two compliance dates dependant on actual HAP emissions in 1996. The actual HAP emissions for this facility for 1996 were 17.01 tons per year (under 50 tons per year). Therefore, the MACT compliance date for Shafer Commercial Seating, Inc is December 7, 1998.

- **2. Emission Factors-** Shafer has indicated that they will calculate VOC and HAP emissions using a material balance approach. MSD Sheets for each coating used at this facility list the VOC content and HAP breakdown per pollutant. This data is multiplied by the material usage to determine the emissions associated with each coating.
- **3. Monitoring Plan-** Monitoring for the Finishing System at this facility focuses on the recordkeeping necessary to determine compliance with emission limitations and specific requirements of the Wood Manufacturing MACT. A computer tracking system capable of storing coating makeup and usage information will be used to document material usage and associated emissions on a monthly basis. To show compliance with the Reasonable Available Control Technology (RACT) requirement the source shall follow the operation practices in Condition 6 above. Compliance with the 20% opacity standard shall be demonstrated by replacing spray booth filters as required by the manufacturer.

Shafer Commercial Seating, Inc must show compliance with the MACT standard emission limitations in one of three ways: 1) Use compliant coatings in all regulated processes, 2) Use a weighted average of Volatile HAP content for all materials used in finishing operations, or 3) Use a combination of control equipment and compliant coatings/weighted average to achieve the emission limits.

The MACT standard requires that a Work Practice Implementation Plan be developed within 60 days of the December 7, 1998 compliance date focusing on 11 action elements which encompass employee training, site housekeeping, and equipment cleaning and disposal procedures.

In addition to the requirements above the source must comply with additional regulations. Therefore, the source will be required to submit a report detailing the specific path they have chosen to comply with the Wood Manufacturing MACT to the Division and EPA within 6 months (180 days) of the Operating Permit issue date following the format that will be provided by

the Division (Appendix G).

4. Compliance Status- On March 27, 1998, Shafer submitted their annual report of emissions for data year 1997. Reported emissions were 15.4 tons of VOCs and 4.1 tons of HAPs. These emissions are below the permit limits in Final Approval 88DE060. This facility is currently considered to be in compliance with all applicable requirements.

IV. Insignificant Activities

Shafer did not include a list of insignificant activities at the site. Clarification on certain activities follows:

Drying Ovens - The Ovens at this facility are rated at less than 5 MMBtu/hr. Therefore, these ovens are considered to be insignificant activity under Colorado Regulation No. 3, C.II.E.3.k.

Dust Collection System - This unit has a baghouse that has an integral process function in addition to acting as a pollution control device. Therefore, the uncontrolled actual emissions are calculated including the benefit of the process equipment (baghouse). The actual uncontrolled emissions are below APEN deminimis and consequently considered an insignificant activity (Colorado Regulation No. 3, Part C, Section II.E.3.a).

V. Alternative Operating Scenarios

No separate operating scenarios were suggested.

VI. Permit Shield

No permit shield forms were included with the sources application.